

CLAIMS

1. System in a digital wireless data communication network (10) for arranging end-to-end (e2e) encryption, especially for communication in audio form, in which data communication network (10) two or more pieces of terminal equipment (11.1, 11.2) communicate with one another, including at least
- a codec (24) to convert an audio signal into a dataflow and vice versa,
 - air-interface encryption means (19, 30),
 - means (28) for management of encryption parameters (TEK, IV) stored in connection with the terminal equipment (11.1, 11.2)
 - an encryption key stream generator KSG (23) to generate a key stream segment (KSS) with the said encryption parameters (TEK, IV),
 - means (20) for encrypting a dataflow and for decryption of the encryption with the generated key stream segment (KSS, IV),
 - means (33.1, 33.2) for synchronization of the encrypted dataflow and for de-synchronizing the synchronization, and
 - at least one interface (19) for receiving the encryption parameters from the data communication network (10),
- and wherein at least one of the pieces of terminal equipment belonging to the data communication network (10) is fitted to function as a special server terminal device (15), which manages and distributes at least the encryption parameters (19) concerning the data communication network (10) to the other pieces of terminal equipment (11.1, 11.2) based on an established criterion, characterized in that

- in the data communication network (10) a special server terminal device (15) is also arranged, which is arranged to manage at least encryption and/or synchronization applications (32) and to distribute these based on an established criterion to the other pieces of terminal equipment (11.1, 11.2) and
- functionalities (21, 22) are arranged in the terminal equipment (11.1, 11.2) for downloading and managing the said applications (32) and
- data memory (23) for storing the applications (32) and
- a processor (20) and operating memory for carrying out the applications (32).

2. System according to claim 1, characterized in that the terminal equipment (11.1, 11.2) is adapted with the said processor (20) to run applications (32) according to the J2ME (Java 2 Platform Micro Edition) specification.

3. System according to claim 2, characterized in that the terminal equipment (11.1, 11.2) is configured in accordance with the MIDP (Mobile Information Device Profile) specification.

4. System according to any one of claims 1 - 3, characterized in that downloading of applications (32) at the terminal equipment (11.1, 11.2) is arranged to take place in a self-organizing manner, such as, for example, as SDS (Short Data Service) messages.

5. Digital wireless terminal equipment (11.1, 11.2), to which functionalities belong, at least

- a module (20) for carrying out encryption,

- one or more modules (33.1, 33.2) for carrying out synchronization, and
- a module (21, 28) for receiving and managing at least encryption keys (TEK),

5 characterized in that the functionality of at least one module (20, 33.1, 33.2, 21) is adapted for implementation with a dynamic application (27) based on a program.

6. Terminal equipment (11.1, 11.2) according to claim 5,
10 including at least a SIM module (28), characterized in that the said application (27) is adapted to arrange command functionality (21') at least at the interface between the SIM module (28) and the terminal equipment (11.1, 11.2) through the programming interface (MIDP API) of the application (27).